R E P O R T R E S U M E S

ED 015 341 VT 004 445

ABSTRACTS OF RESEARCH STUDIES IN AGRICULTURAL EDUCATION COMPLETED IN 1966-67 IN THE PACIFIC REGION.

BY- LOREEN, C.O.

PUB DATE DEC 67

EDRS PRICE MF-$0.25 HC-$1.80 43P.

DESCRIPTORS- *AGRICULTURAL EDUCATION, *EDUCATIONAL RESEARCH, *MASTERS THESES, *ANNOTATED BIBLIOGRAPHIES, PACIFIC STATES,

THIRTY-FIVE STAFF STUDIES AND MASTERS' THESES IN AGRICULTURAL EDUCATION ARE REPORTED IN THE FOLLOWING AREAS -- ACADEMIC ACHIEVEMENT, ADMINISTRATOR ATTITUDES, ADVISORY COMMITTEES, AGRICULTURAL MACHINERY, ANIMAL SCIENCE, AREA VOCATIONAL SCHOOLS, CAREER CHOICE, CURRICULUM, EDUCATIONAL NEEDS, EDUCATIONAL OBJECTIVES, EMPLOYMENT OPPORTUNITIES, GRADUATE FOLLOWUP, INTERNATIONAL EDUCATION, PRINCIPLES APPROACH, PROGRAM PLANNING, PUBLIC RELATIONS, STUDENT SELECTION, TEACHER-ADMINISTRATOR RELATIONSHIPS, AND VOCATIONAL AGRICULTURE TEACHERS. THE PURPOSE, METHOD, AND FINDINGS OF EACH STUDY ARE SUMMARIZED. THE STUDIES ARE ARRANGED ALPHABETICALLY BY AUTHOR WITHIN EACH STATE. (JM)

ED015341

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ABSTRACTS OF RESEARCH STUDIES IN AGRICULTURAL EDUCATION

COMPLETED IN 1966-67

IN THE PACIFIC REGION

Prepared by

C. O. Loreen, Professor
Agricultural Education
Washington State University

VT004445

Prepared for Distribution at
The American Vocational Association Convention
Cleveland, Ohio
December 4-8, 1967

INTRODUCTION

This compilation of research in agricultural education includes 37 studies completed during 1966-67 in 6 states in the Pacific Region.

All studies submitted by teacher educators are included in this report although some may not meet the criteria that were established for the selection of studies for the U. S. Office of Education publication, Summaries of Studies in Agricultural Education.

The compilation of abstracts of research in agricultural education is an activity of the Research Committee of the Agricultural Education Division of the American Vocational Association.

C. O. Loreen
Pacific Region Representative
Research Committee
Agricultural Education Division
AVA

November 1967

ARIZONA

Floyd G. McCormick

CLARIDGE, JAMES DUANE. An Appraisal to Determine the Areas of Instruction Needed in Agricultural Mechanics by Graduates in Agricultural Education at the University of Arizona. Master's problem, M. Ag. Ed., 1967, University of Arizona. 25 p. Library, Department of Agricultural Education, University of Arizona, Tucson.

Purpose. -- To determine: (1) the areas of instruction needed in agricultural mechanics by vocational agriculture teachers; (2) if adequate, inadequate, or no instruction was received in these areas; and (3) the need for new areas of instruction.

Method. -- Graduates from 1962-66 in Agricultural Education at the University of Arizona were used to obtain the data. Each graduate who was teaching or had taught vocational agriculture received a questionnaire.

Findings. -- The instructional areas of oxy-acetylene, surveying, rope work, arc-welding, concrete work, wood working, drawing plans, and painting in agricultural mechanics received 50 per cent or more responses of the graduates indicating adequate instruction was received at the University of Arizona.

Inadequate instruction, as indicated by 50 per cent or more of the graduates, was received in the instructional areas of electricity, tool conditioning, cold metal work and use of power equipment.

Seventy-five per cent or more of the graduates indicated that they received no instruction in the areas of metal lathe work, small gas engines, micrometer reading and sheet metal work.

Fifty-five per cent or more of the graduates were of the opinion that all twenty-two areas should be included in an undergraduate program in agricultural mechanics. The area of metal lathe work is a questionable area of instruction.

New areas of instruction that were suggested in the instructional area of agricultural mechanics by the graduates were: adjustment of machinery; advanced welding; pipe work; buildings and structures; operation of new machinery; salesmanship and new machinery set up.

There were 55 per cent of the graduates that indicated more time should be given in the instructional areas of agricultural mechanics and 50 per cent suggested that the courses offered should be more practical.

The facilities used in teaching the areas of agricultural mechanics were deemed by 25 per cent to be inadequate.

ERICSSON, GARY EUGENE. An Evaluation of a Basic Horseshoeing Course by Students and Instructors. Master's Problem, Master of Ag. Educ., 1967. University of Arizona, Tucson.

Purpose. -- The purpose of the study was to determine skills and knowledge which students and instructors felt should be included in a basic horseshoeing course.

Method. -- Names of instructors and former students were obtained from universities offering or having offered horseshoeing courses. Data were obtained from questionnaires sent to seven instructors and forty-seven students who resided in fourteen different states and overseas.

Findings. -- 1. A basic horseshoeing course appears to have a place in training beginning horseshoers, but wherever possible it should contain more than 36 to 40 hours.

2. The anatomy and physiology of a horse's feet and legs should be taught to give students a foundation upon which to build their shoeing skills.

3. Students should be taught to recognize normal and abnormal travel in horses, preferably through the use of demonstrations.

4. A basic course should include cold shoeing and give the students ample practice performing the various steps in this area.

5. When time permits, basic corrective shoeing should be given, preferably as demonstrations.

6. How to build a forge fire and the methods of hot-shoeing should be given as demonstrations, allowing as much time as possible for student practice.

7. All advanced techniques such as building horseshoes, advanced corrective shoeing, and shoeing horses for all types of use should definitely be postponed until an advanced course.

JULIAN, ROBERT E. An Evaluation of Placement Opportunities Available to Students of Vocational Agriculture in Tucson, Arizona. Master's problem, M. Ag. Ed., 1966, University of Arizona. 34 p. Library, Department of Agricultural Education, University of Arizona, Tucson.

Purpose. -- To determine: (1) The nature and scope of jobs related to agriculture that are available to students in the Tucson community; and (2) the most available placement areas that will give the vocational agriculture students the most desirable work experience.

Method. -- Data were obtained from questionnaires sent to 113 agricultural businesses. Random interviews of nine businesses were also used to secure information.

Findings. -- There were 40 businesses desirable as training stations in the agricultural sales and service area, 25 businesses in the agricultural machinery area, 37 businesses in the horticulture area, and 20 other agricultural businesses. Fifty per cent of the businesses in agricultural machinery, 50 per cent of the businesses in horticulture, and 54 per cent in the other agricultural businesses indicated a willingness to participate in the student training program. Agricultural sales and service businesses did not indicate a desire to participate.

Work experiences in sales, delivery, set-up, stocking, service, ordering, clean-up, maintenance and repair were found to be the most satisfactory types of work experiences in the cooperative program.

Fifty per cent of businesses in agricultural machinery and 44 per cent of the businesses in horticulture showed a definite need for student training in their respective areas. Very little need was indicated in the agricultural sales and service area. Need in the area of other agricultural businesses was not conclusive.

The hours most desirable for student training was 3:00 to 5:00 p.m. Monday through Friday in agricultural sales and service and agricultural machinery area. The horticulture area and other agricultural businesses indicated 1:00 to 5:00 p.m. as desirable training time for their respective areas. Horticulture also desired student training on Saturday.

The rate of pay varied from $1.10 to $1.20 per hour depending on the area of work. The average hours for student work per week varied from 14 to 20 hours. Insurance coverage did not affect hiring student trainees.

KANTOLA, GENE CLAUDE. Factors and People Influencing Occupation Selection of High School Seniors in Arizona. Problem, M. Ag. Ed., 1967, University of Arizona. 49 p. Department of Agricultural Education, University of Arizona, Tucson.

Purpose. -- To determine what factors influenced high school seniors in their tentative selection of an occupation and to determine which persons were the most influential in helping the students select these occupations in order to gain insights which would provide for a sounder basis for counseling.

Method. -- From the review of literature and help of staff members, the researcher gleaned a list of 13 occupational factors, eight influential people, and six characteristics of high school seniors which constituted the closed-form questionnaire developed for this study.

The investigator selected the senior members of the 37 high schools in Arizona that have vocational agriculture departments as the source of data for this study. From the total of 37 high schools, 21 agreed to administer the questionnaire. A total of 1580 questionnaires were used in tabulating the data.

The senior members were requested to mark the questionnaire in the following manner:

1. Answer as to age, sex, whether occupational choice was made, type of occupation, whether they planned to further their education, type of educational institution they were planning to attend
2. Rank of thirteen occupational factors according to their importance to each student
3. Rank of influential people according to their importance to each student
4. Supply any additional occupational factors and influential people as each student deemed necessary.

Findings. -- The high school senior students surveyed fell between the ages of 16 and 21. Ninety per cent of the students surveyed were in the age groups of 17 and 18. A total of 69.4 per cent of all the students surveyed have chosen an occupation as opposed to 30.6 per cent who have not chosen an occupation. A total of 83.3 per cent of the students surveyed plan to continue their education beyond the high school level. The most influencing occupational factors to high school senior students of Arizona, according to their importance were: salary, security; interesting work; working conditions; and advancement. Those factors that were ranked least were: independence; prestige; observing others; required learning easy; and future dreams. In over all rank, the students indicated that mother, father, teacher, and high school guidance counselor exerted the most influence upon them in their selection of an occupation.

VAN METER, CHARLES T. Placement Opportunities in Agricultural and Related Businesses in the Peoria High School District. Problem, M. Ag. Ed., 1967, The University of Arizona. 34 p. Department of Agricultural Education, University of Arizona, Tucson.

Purpose. -- The purpose of this study was to determine the placement opportunities for high school age vocational agriculture students in productive agriculture and related businesses in the Peoria High School District.

Method. -- The study included 61 agricultural enterprises, and 29 related businesses in the Peoria High School District. The data were collected by means of questionnaires.

Findings. -- There were 296 full-time male employees, and 578 part-time male employees on the 51 farms surveyed in the Peoria High School District. Seventy-two per cent of the farmers indicated a need for possible employment of 106 male high school age students on a part-time basis.

There were 99 full-time employees, and 94 part-time employees in the 29 agriculture related businesses surveyed in the Peoria High School District. Fifty-one per cent of the businesses indicated a need for possible employment of 26 high school age students on a part-time basis.

The greatest need for employment of high school age students was during the summer months.

COLORADO

Ralph Canada

ANNAN, JOHN L. Occupational Aspirations of Colorado High School Students. Master's Report, M.E., 1966, Colorado State University. 123 p. Library, Colorado State University, Fort Collins.

Purpose. -- To determine the occupational aspirations of Colorado high school students enrolled in vocational agriculture as compared with those enrolled in subjects other than vocational agriculture.

Method. -- The population studied consisted of 192 vocational agriculture students and 187 students enrolled in subjects other than vocational agriculture and were selected by means of random numbers. Schools offering vocational agriculture during the 1965-66 school year were used in the study. The data were collected by means of a survey questionnaire and were tabulated by means of IBM processes.

Findings. -- Sixty-six and seven-tenths of the vocational agriculture students had ultimate aspirations in farming and non-production agricultural occupations whereas, 74.9 per cent of the non-vocational agriculture students indicated occupational aspirations in non-agricultural areas. Both groups aspired strongly toward professional, technical, and skilled occupations. Regardless of the type of occupational aspiration, 96.5 per cent of the vocational agriculture students and 87 per cent of the non-vocational agriculture students indicated a willingness to enroll in training for the occupations of their choice as a part of their high school educational program. Parents were the most influential persons in assisting students with occupational aspirations. Vocational agriculture students who aspired to non-production agricultural occupations resided mainly on farms with only 24.4 per cent living in a town or city. Where the parents had higher educational achievements, the students in turn had higher occupational aspirations. A need for additional guidance and counseling regarding non-production agricultural occupations was expressed by 94.8 per cent of the vocational agriculture students and 77 per cent of the non-vocational agriculture students.

HERGENRETER, LEONARD A. Need for Farm Tractor and Machinery Mechanics for the Farm Implement Industry in Colorado. Master's Report, M.S., 1966, Colorado State University. 156 p. Library, Colorado State University, Fort Collins.

Purpose. -- The primary purpose was to determine the number of tractor and machinery mechanics presently employed and the predicted employment needs for 1967 for the implement industry in Colorado. Eight questions were listed as secondary purposes for study.

Method. -- Questionnaires were mailed to 275 implement dealers in Colorado and the immediate adjacent areas of other states bordering Colorado. Data were used from 150 usable returned questionnaires.

Findings. -- The employers estimated a substantial increased need for additional skilled and semi-skilled tractor and machinery mechanics by 1967.

Over half the firms indicated a need for mechanics skilled in servicing and repairing small air cooled gas engines.

Part-time and unskilled workers were found to play an important role in the farm equipment businesses.

It was found that 57 per cent of the skilled and 22 per cent of the semi-skilled tractor mechanics had eight or more years of farm experience after the age of 14 years. Approximately 46 per cent of the skilled and 25 per cent of the semi-skilled machinery mechanics had eight or more years of farm experience after the age of 14 years.

Sixty-one and three-tenths per cent of the 150 employers surveyed preferred employees with a farm experience background.

Forty per cent of the employers preferred their tractor mechanics to have a trade or technical school background. However only 7.3 per cent actually required such educational background.

The average annual salary for beginning tractor mechanics was found to be $3,736. Experienced tractor mechanics salaries averaged $4,970 annually. Beginning machinery mechanics salaries averaged $3,600 annually while experienced machinery mechanics salaries averaged $4,513.

Over 80 per cent of the employers provided paid vacations. More than half provided paid sick leave and bonuses.

The major reasons listed by the employers for discharging their tractor and machinery mechanics in order of importance were, "incompetence," "low-output," "undependable," and "poor personal habits."

The majority of the mechanics who left the jobs voluntarily listed "changing occupation," "low salary," and "disagreement with employees," as their reasons for quitting.

Employers generally favored cooperating in cooperative work experience training program with the schools.

IVERSON, MAYNARD J. Opportunities in Non-production Agricultural Occupations. Master's Report, M. Ed., 1967, Colorado State University. 118 p. Department of Vocational Education, Colorado State University, Fort Collins.

Purpose. -- To determine opportunities for student placement in non-production agricultural occupations in Minot, North Dakota.

Method. -- The data were collected through a questionnaire administered by personal interview to managers of 41 firms directly and primarily serving farmers.

Findings. -- The firms employed 685 workers in 58 job titles. Retailing and servicing were primary functions of over half the firms. Major products and services engaged in were farm machinery/equipment, dairy products, crops spraying and grain buying.

Most employees were male; over half had farm experience. Employment was relatively stable with 40 new employees expected (1967-70). Annual turnover was 103.6 persons for the 41 firms. Incompetency and part-time/seasonal work were the major causes for discharge and voluntary leaving of employees, respectively. The State Employment Service, persons dropping in and recommendations by known persons were most frequent sources of new employees. Most firms paid beginning workers from $250 to $550 per month. All firms provided retirement benefits. Employers generally preferred and required high school graduation for beginning workers. Employers preferred farm residence background for all job levels except clerical. Minimum age for job entry was 18.

Most new employees received informal on-the-job training. Twenty-three firms were collectively willing to hire approximately 30 students under a cooperative work experience training program.

IDAHO

H. A. Winner

DIXON, DARRYL COMAN. A Study of Factors Affecting the Curriculum, the Teacher, and the Objectives of the Vocational Agriculture Program in Idaho. Thesis, M. S., 1967, University of Idaho. 85 p. Library, University of Idaho, Moscow.

Purpose. -- To make the Idaho vocational agriculture teachers aware of criticisms of vocational agriculture curriculum, teachers, and objectives; also to give them an opportunity to evaluate these criticisms as applied to their own departments.

Method. -- An extensive review of literature was made related to criticisms facing the vocational agriculture program. A questionnaire was then devised and sent to the Idaho vocational agriculture teachers for their evaluation. The data obtained was then summarized and analyzed.

Findings. -- Some of the major conclusions were:

1. Idaho vocational agriculture teachers were not carrying on good programs of public relations, teacher-effectiveness evaluation, and local vocational agriculture program evaluation.

2. Many supervised farming programs in Idaho were of too small scope to lead into the establishment of farming.

3. The Idaho vocational agriculture teachers were not determining local needs and alterations of the vocational agriculture program by the use of advisory committees or by meeting with their local boards of education.

4. Over nine of ten Idaho vocational agriculture teachers supported the proposal that the vocational agriculture program should prepare youth and adults for non-farm occupations which require a knowledge of agriculture.

FAULKS, FREDERICK GLENN. A Study of the Factors Influencing Recruitment of Students in the Agricultural Education Curriculum in Idaho. Thesis, M. S., 1967, University of Idaho, Moscow.

Purpose. -- The purpose of this study was to determine possible ways which would prove beneficial to those who are involved in the selection and recruitment of students for the agricultural education curriculum.

Method. -- A questionnaire was developed and sent to Idaho vocational agriculture instructors and students majoring in agricultural education at the University of Idaho. The results of this study were based on the opinions and situations of the respondents.

Findings. -- About 45 per cent of the students majoring in agricultural education chose that curriculum while in high school, while another 36 per cent decided on the curriculum before completion of the freshman college year. Teaching was the career objective of over 50 per cent of the respondents. The vocational agriculture instructor was considered the most influential person concerned with recruitment of agricultural education majors. Also, an appreciation for vocational agriculture and FFA influenced many of the respondents to select an agricultural education major and later a teaching career.

As a result of this study it is recommended that Idaho members of the vocational agriculture teaching profession should organize a well planned recruitment program. It was also determined that the instructor in each department should be continually reminded of the role he holds in recruitment.

HOLMQUIST, LARRY PHIL. A Follow-up Study of the Future Farmers of America Members Who Earned the State Degree in Idaho From 1955 Through 1960. Thesis, M. S., 1967, University of Idaho. 44 p. Library, University of Idaho, Moscow.

Purpose. -- The purpose of the study was to obtain information regarding the occupational and education status of Idaho State Farmers and to obtain their evaluation of the vocational agriculture and FFA programs.

Method. -- The addresses of 172 State Farmers were obtained from 36 Idaho vocational agriculture teachers. A questionnaire was sent to each of them and the findings of the study are based upon 136 completed questionnaires which were received from the State Farmers.

Findings. -- Farming was chosen as a career by 65 or 47.8 per cent of the State Farmers and other agricultural occupations were chosen by 24 or 17.6 per cent for a total of 89 or 65.4 per cent in the broad field of agriculture. One hundred and seven or 78.7 per cent of the State Farmers attended college and 61 or 44.9 per cent graduated. More than one half chose to major in agriculture. Sixty-two per cent of those who were not farming had entered professional occupations. Areas of vocational agriculture and FFA rated highest by the State Farmers were record keeping, farm management, and public speaking.

KAPPEN, CARL LEROY. A Study to Determine the Factors Affecting the Rapport Between School Administrators and Vocational Agriculture Instructors. Thesis, M. S., 1967, University of Idaho. 119 p. Library, University of Idaho, Moscow.

Purpose. -- To discover any possible ways which would help to improve the administration's knowledge and respect of the vocational agriculture instructor and his program. To obtain the administration's point of view of what they believe the vocational agriculture instructor's attitude and actions should be. To determine which qualities are preferred in an ideal vocational agriculture instructor. To ascertain any possible problem areas resulting from a lack of communication between school administrators and vocational agriculture instructors. And, to suggest possible ways and means of improving the general area of administrator-teacher communications.

Method. -- A questionnaire was mailed to administrators of all Idaho high schools which had a vocational agriculture program in their curriculum. From these answers a summary was compiled which consisted of the administrators' opinions of various aspects of the vocational agriculture instructor and his program.

Findings. -- Administrators believed that in-service training was important and should be done for self-improvement. Cleanliness, both in the appearance of the shop and the clothes the instructor wears is very important in the administrators' point of view. The vocational agriculture instructors rate average or above average in the overall tabulation. There were, however, a few areas in which the instructor fell to a below average rating. The survey indicated the agriculture program should be evaluated periodically in order to keep it up to date with the mechanization of today. Administrators believed that the advantages of the vocational agriculture department overcame scheduling difficulties and major costs of maintenance.

MOORE, RICHARD DENNIS. A Study of the Importance of the Maintenance and Repair of Farm Machinery Hydraulic Systems in Latah County. Thesis, M. S., 1967, University of Idaho. 52 p. Library, University of Idaho, Moscow.

Purpose. -- To determine the importance of farm machinery hydraulic systems in Latah County, Idaho, and determine the maintenance and repair jobs accomplished on these systems on the home farm. From this study it would be determined what information in the general area of farm hydraulics should be included in possible future vocational agriculture courses in farm hydraulics. The study was also intended to establish the need for instruction of this type in vocational agriculture.

Method. -- Statistical data were obtained, through personal interview, from fifty Latah County farmers whose farms were selected on an acreage basis with the same percentages of farms, classified according to size, used in the study as actually existed in the county. Shop foremen of five commercial repair shops operating in Latah County were also surveyed through personal interview.

Findings. -- It was found that, in general, the farmers surveyed who farmed under 260 acres operated part-time farms and owned few hydraulic systems. The farmers surveyed who farmed over 260 acres all owned hydraulic equipment and, in general, operated full-time farms. The number of hydraulic systems increased as the size of farm increased. On the farms surveyed, the number of hydraulic systems is increasing. The majority of farmers surveyed accomplished their own maintenance work on the home farm and did the minor repair jobs on their hydraulic systems. Few farmers surveyed accomplished major hydraulic repair jobs on the home farm. It was determined that instruction in farm hydraulics should be included in Latah County vocational agriculture farm shop programs. This instruction should be designed to give an understanding of the hydraulic systems and emphasize the importance of proper maintenance procedures.

VAN HOUTEN, RICHARD JAMES. An Evaluative Study of Public Relations Activities in Regard to Vocational Agriculture in Idaho. Thesis, M. S., 1967, University of Idaho. 63 p. Library, University of Idaho, Moscow.

Purpose. -- The purpose of this study was to make the Idaho vocational agriculture teachers more aware of public relations and its importance in a total vocational agriuclture program. This study was also intended to encourage the use of a planned vocational agriculture public relations program, which would meet the needs of the vocational agriculture department.

Method. -- A review of literature was made related to vocational agriculture public relations. A questionnaire was devised and sent to seventy Idaho vocational agriculture teachers for their evaluation. The data obtained from the sixty-one returned questionnaires were then summarized and analyzed.

Findings. -- A great deal of the information determined in this study, is contained in the conclusions. Some of the major conclusions were as follows: (1) A greater percentage of Idaho vocational agriculture teachers should place a high degree of emphasis on public relations. (2) A vocational agriculture public relations program should be designed to obtain the community's support and confidence. (3) The experience trend, indicating that forty-two out of fifty-six of the activities received progressively less value as the respondents indicated progressively less experience in the activity, was of sufficient significance to assume that the more experience a vocational agriculture teacher has with a public relations activity, the higher he will value this activity as a part of his public relations program. (4) Regardless of the value placed on an activity, by the respondents in this study, the final determinant of its value to the instructor will depend upon the ability of the vocational agriculture teacher to adapt the activity to the needs of his department in his community.

WALLACE, HARVEY RAY. The Status of Vocational Agriculture Advisory Councils in Idaho. Thesis, M. S., 1967, University of Idaho. 56 p. Library, University of Idaho, Moscow.

Purpose. -- To make an evaluation of the use of advisory councils for vocational agriculture in Idaho. In addition a study was made to find the areas of assistance given by advisory councils and the reasons why all Idaho Vocational Agriculture teachers do not use advisory councils.

Method. -- Statistical data were obtained from forty-eight Idaho Vocational Agriculture teachers by the use of a mail questionnaire. This questionnaire provided all the information necessary for the purpose of this study.

Findings. -- It was found that too few Idaho Vocational Agriculture teachers were using advisory councils. From the results obtained by questionnaires from those teachers who had established advisory councils, very few disadvantages were listed which were derived from advisory council use. All these teachers using councils expressed great satisfaction from advisory council use.

Data received from those teachers in Idaho who did not have established advisory councils included very few valid reasons for not using advisory councils.

OREGON

Phil Davis

ATWOOD, MELVIN BOYD. The Utilization of School-Owned Property in the Vocational Agriculture Curriculum. Thesis, M.S., 1967, Oregon State University. 76 p. Kerr Library, Oregon State University, Corvallis.

Purpose. -- The specific objective of this study was to determine if secondary schools currently offering vocational agriculture in southwestern Washington, western Oregon (west of the Cascades), and northwestern California, have school-owned land available and usable in the agriculture program.

Method. -- Questionnaires were mailed to all high schools offering vocational agriculture in western Oregon and to a selected sample of schools in southwestern Washington and northwestern California. A second questionnaire was developed and ten agriculture departments in western Oregon were selected and personally visited to obtain specific information concerning ways of using school-owned land in the agricultural program.

Findings. -- One hundred questionnaires were mailed; 85 returned. Thirty-five schools reported no land; 50 schools reported land available. Thirty-eight schools reported that land was available and used in the agriculture curriculum. Five reported land owned but not available for usage. Seven schools had land but it was not usable in the vocational agriculture curriculum.

Secondary schools returning questionnaires reported that 32 of the 50 departments reported school-owned land adjacent to school grounds.

DAUGHERTY, RONALD DEWAYNE. Agricultural Education Needs As Expressed by Public Secondary School Personnel. Thesis, M.S., 1966, Oregon State University. 79 p. Oregon State University Library, Oregon State University, Corvallis.

Purpose. -- The purpose of this study has been to isolate the needs of schools desiring other than production emphasis in their agricultural programs and to make a general proposal to meet these needs.

Method. -- Procedures in this study included a survey by opinionnaire of public secondary school principals or curriculum directors, guidance personnel, and agricultural instructors. After the opinionnaires were returned, nine of the respondents were interviewed for more specific information pertaining to the broad areas included in the opinionnaire. A questionnaire was sent to agricultural departments to obtain information concerning changes in their present agricultural programs to better meet the needs.

Findings. -- Eleven of the thirty-eight schools surveyed had agricultural programs at the time of the survey, but the findings of the study point out a need for agricultural education in all of the secondary schools surveyed. The desired offerings in each school varied, but any agricultural course offering should be elective and not mandatory to the students of the school. Most of the respondents indicated a need for more than just one agricultural course in their school to serve the needs of the students. The non-farm agricultural occupations were an area of concern to most of the respondents.

A suggested course in Horticulture is included in the study based upon several of the disclosed considerations. The proposed course is for one semester and the inductive inquiry approach based on principles is suggested. The interviews revealed some other areas of interest to school personnel as a possible agricultural offering.

The conclusions of the study are: the procedures used in carrying out this study are valuable for the purpose of identifying limited guidelines by which the secondary schools' agricultural education program might be up-dated; the group of non-agriculture teaching school personnel involved in this study were not sufficiently knowledgeable of agricultural programs. This limited the validity of their opinions and recommendations concerning future programs; and the information obtained through the various procedures used in this study does not have sufficient factual knowledge to enable the drawing of sound conclusions as to what is necessary for meeting the needs of urbanized school districts in agricultural education.

FERGUSON, JOHN MARSHALL. A Follow-up of the Graduates of Agricultural Education at Oregon State University. Thesis, Ed.M., 1966. Oregon State University. 59 p. Oregon State University Library, Corvallis.

Purpose. -- To determine to what extent the Agricultural Education graduates at Oregon State University have been placed in teaching and to gather information which will be of value to the Agricultural Education Department in order that continuing evaluation studies can be made. Information dealing with retention of teachers was given particular attention.

Method. -- The graduates of the period January, 1950 through June, 1964 were divided into two separate groups. The men who had remained in the teaching profession were designated as Group 1; the men who had left the profession were placed in Group 2.

Two separate questionnaires were used. The first page of both questionnaires was identical and was designed to gather information common to both groups. The second page was designed to gather information according to the group the individual graduate was placed in.

Findings. -- 1. Most (81.2 per cent) graduates of Agricultural Education, do enter teaching Vocational Agriculture the first year.

2. Oregon's drop-out rate after the first year of teaching is well below the National Average.

3. There appears to be some indication that the entry school plays a part in causing a graduate to remain in the profession longer or to drop out.

4. The median length of service at the entry school was found to be 3.82 years.

5. The mean number of years of service was found to 5.25 and the median to be 4.5 years.

GALBRAITH, GORDON GWYNNE. A Follow-up of High School Graduates in Hood River County. Thesis, Ed.M., 1966. Oregon State University. 55 p. Oregon State University Library, Corvallis.

Purpose. -- The purpose of this study was to find the differences in the post high school situations of those graduates who had taken vocational agriculture, and those who had not, in Hood River County, Oregon. An expanded vocational agriculture program and an increased selection of class offerings necessitated the study of differences between these graduates. This information was sought in order to evaluate the needs of Hood River County youth, and to determine whether the present vocational agriculture program was effective in meeting these needs.

Method. -- A mailed questionnaire was sent to all of the vocational agriculture graduates from the years 1953 to 1962 from Hood River County, and a random sample of a like number of non-agricultural graduates.

Findings. -- 1. A higher percentage of agricultural graduates were employed full time, or self employed.

2. More agricultural graduates were employed in the field of agriculture.

3. Over twice as many agricultural graduates were self employed.

4. Three fourths of the employed agricultural graduates indicated their agricultural training was meaningful to their occupations.

5. Forty-two per cent of the agricultural graduates, as compared to thirty per cent of the non-agricultural graduates had pursued post-high school education other than a four year college.

6. More agricultural graduates were in a higher income range, and less of them in a lower income range than the non-agricultural graduates.

7. A higher per cent of agricultural graduates located in Hood River, or adjacent counties as compared to the agricultural graduates.

8. Sixty-nine per cent of all Hood River County graduates had entered some form of post-high school education.

HEILMAN, CASMER FRANKLIN. Utilizing Student and Employment Data in Vocational Education Planning. Thesis, Ed.M., 1966, Oregon State University. 72 p. Kerr Library, Oregon State University, Corvallis.

Purpose. -- The purpose of this study was to examine student and employment data and utilize this information in developing an expanded program of vocational education in Hood River County Schools.

Method. -- Community leaders, educators and agencies were interviewed to obtain information and ascertain the educational and employment needs of the county. Tabulation and analysis of these plus employment and school records provided the findings for this study.

Findings. -- A review of literature indicated that most educators recognize the urgent need for a comprehensive high school that will prepare students for both college and work. It is generally agreed that specialization should not come at the high school level but instead offer broad occupational guidance and exploratory programs in occupational clusters.

Each phase of the proposed program attempts to develop a progression of vocational guidance and occupational preparedness. Phase one emphasizes occupational information and exploration of necessary skills in four vocational areas. Phase two and three consist of deliniation and skill development through vocational guidance, curricular offerings and work experience in agriculture, industrial, business and home economics education. Students have the opportunity to participate in numerous vocational offerings in preparation for job entry or further training and still meet academic requirements.

HELMICK, ROBERT W. Factors Determining the Establishment of Area Vocational Schools for Tillamook and Clatsop Counties. Thesis, M. S., 1967. Oregon State University. 110 p. Library, Oregon State University, Corvallis.

Purpose. -- The primary purpose was to investigate the following:

1. What employment opportunities exist in Tillamook and Clatsop Counties?

2. How many potential vocational students are there in Tillamook and Clatsop Counties?

3. What is the present status of vocational curriculum, facilities and personnel in the two-county area?

4. What are the legal limitations, if any, of two or more educational units in cooperating to provide occupational education?

Method. -- Primary and secondary data were gathered by survey forms and personal interviews from students, administrators and public officials.

Findings. -- Approximately 70 per cent of the students of the two-county area will have to seek employment outside the county.

Approximately 70 per cent of the 4,706 students surveyed indicated that they would like occupational education in high school. This would be approximately 550 students each year desiring occupational education in this two-county area.

Vocational curriculum, facilities and personnel were found to be generally quite inadequate to meet the needs.

There are practically no legal limitations which would prohibit the two-county area from cooperating to provide occupational education.

KEESLER, NORMAN GLEN. Competencies Needed in Off-farm Agriculture Based on a Survey of Agricultural Industry in the Vale Area. Thesis, Ed. M., 1968, Oregon State University. 69 p. Oregon State University, Corvallis.

Purpose. -- The purpose of the study was to determine a core of competencies and related information about which group instruction may be given in preparing a student for selecting and advancing in an agricultural occupation of his choice.

Method. -- A mailed questionnaire was sent to businesses in the geographical area of Vale, Nyssa, and Ontario, Oregon to determine the need for employees with an agricultural background. One-third of the respondents were interviewed personally to determine general competencies looked for in agricultural employees. A check list was used to record interview information.

Findings. -- The 91 businesses consulted employed 1022 persons of which 61 per cent needed an agricultural background. Competencies of most concern to employers interviewed were those involving human relations and salesmanship. Related information tabulated included: sources for securing employees, on the job training opportunities, cooperative work experience, present numbers employed and future employment outlook, and personal background requirements for new employees.

LACY, JAMES VIRGIL. A Study of the Employment Opportunities, the Human Resources, and Vocational Education Resources in Klamath County 1966. Thesis, M. Ed., 1967, Oregon State University. 96 p. Library, Oregon State University, Corvallis.

Purpose. -- The purpose of this study is to determine the need for vocational education in Klamath County by analyzing employment opportunities; student potential for vocational education; present vocational education facilities, programs, and personnel; and the possibilities of coordinate functioning of education units.

Method. -- Employment opportunities were determined by analyzing secondary data listed in the Klamath County skill survey published by Oregon State Department of Employment.

Data concerning student potential for vocational education were gathered by questionnaire given to all students, grades 9-12, in Klamath County. The total number was 2,762.

Information regarding present facilities, programs and personnel was compiled and submitted by administrators of each of the schools involved.

Means of coordinate functioning of educational units was determined by analyzing secondary sources involving school laws, rules, and regulations as well as school board policies.

Findings. -- Employment information indicated a need for over 3,000 workers in the five year period, 1966-1970. This represents more than one-fourth the number presently employed in the county. The study indicated that expansion and replacement needs are greatest in the semiskilled, skilled, service and clerical occupations. Net shortages are forecasted in the technical, managerial and skilled areas whereas net surpluses are shown in the clerical, sales, service and semiskilled areas.

Student potential for vocational education was found to be about sixty-four per cent. Even so, only about twelve per cent were presently enrolled in vocational education courses. Reasons given by students for this were conflicts with other electives and the unavailability of courses in the subject areas wanted.

Present programs and facilities were found to be inadequate or lacking. A need for more time, better facilities and a comprehensive guidance program were indicated. Additional staff having very recent training, would be needed if programs were expanded.

Investigations showed that educational units could coorperate in the planning and execution of the educational programs for the benefit of students in two or more districts.

LYDA, HARRY LEE. A Comparison of High School and College Grades. Thesis, M. S., 1967. Oregon State University. 62 p. Library, Oregon State University, Corvallis.

Purpose. -- The purpose was to compare high school and college grade point averages earned by students in the School of Agriculture at Oregon State University in the areas of Mathematics, English, Science, and Chemistry.

Method. -- Only those students who enrolled in the School of Agriculture at Oregon State University fall term 1962 and attended three or more terms were considered. Data for the thesis were obtained from transcripts in the office of the Dean of Agriculture and from the student files in the Registrar's Office.

Findings. -- 1. Thirty-five to 40 per cent of those who achieved (3.00 or above) in high school went on to achieve in similar subject areas in college.

2. Four to 28 per cent of those who did average or better (2.00 or above) in high school went on to achieve in similar subject areas in college.

3. Sixty-one to 83 per cent of those who did average or above in high school also did average or above in similar subjects in college.

4. The grade point averages decline between high school and college for Science, English, Mathematics, and Chemistry were .62, .61, .46, and .03 respectively.

5. The college grade point average declined .51 from the high school grade point average, considering all work completed.

6. The study indicated school size has little to do with success in college, but does indicate that the small school gives initially higher grades.

MULTANEN, MONTY EDWARD. Off-Farm Agricultural Occupation in Yamhill County. Thesis Ed. M., 1966, Oregon State University. 80 p. Library, Oregon State University, Corvallis.

Purpose. -- The primary purpose was to identify and study the off-farm agricultural occupations in Yamhill County.

Method. -- A questionnaire was sent to all agriculturally related firms in the county. A comprehensive follow-up interview was completed with 19 firms which had agriculturally-oriented occupations.

Findings. -- The 181 firms that returned the mailed questionnaire employed 542 persons who needed an agricultural background.

The 19 firms interviewed employed 71 persons (46.10 per cent of total employment) who needed an agricultural background to satisfactorily perform their jobs.

Of the 71 employees 26.76 per cent were employed at the semi-skilled level, 15.49 per cent at the skilled level, 7.04 per cent at the clerical level, 22.53 per cent at sales level, 22.53 per cent at the proprietors and managers level, 2.81 per cent at the technical level, and 2.81 per cent at the professional level.

The 19 firms estimated a need of 33 additional employees with an agricultural background within the next five years.

Of the 19 firms interviewed, 57.89 per cent were willing to cooperate with school districts in occupational experience programs.

The employers recorded that high school completion was sufficient for 49 of the 71 job titles.

Work experience was considered essential for 19.7 per cent of the job titles; farm experience and vocational agricultural training were reported as being desirable for 90.13 per cent of the jobs.

A general agricultural knowledge was required by 81.69 per cent of all the job titles. Thirty-three (46.48 per cent) of the employees needed supporting competencies in bookkeeping, business law, and typing.

WAY, ROBERT F. What Agriculture Teachers Say About Teaching Basic Agriculture By Use of Principles. Thesis, M. Ed., 1967, Oregon State University. 59 p. Department of Vocational Education, Oregon State University, Corvallis.

Purpose. -- The purposes were to determine the teaching methods used by Oregon agriculture instructors in their basic agriculture classes, to determine whether Oregon agriculture instructors teach by the "principle approach," and to learn which subject matter areas most successfully adopt the "principle approach" as a teaching method.

Method. -- Data for this study was obtained from a questionnaire sent to all teachers of basic agriculture in Oregon. Teaching methods were examined, procedures were reviewed and a comparison of teachers having attended a curriculum workshop on the use of the "principle approach" was made to teachers not having this formal training. Follow-up letters were sent to teachers indicating outstanding success in teaching by the use of the "principle approach."

Findings. -- Over 80 per cent of the teachers surveyed emphasized leadership and farm mechanics in their basic agriculture classes. Occupational training and physical and biological sciences were taught by over 70 per cent of the teachers.

Almost 99 per cent of all basic agriculture teachers used group discussion as a teaching method. The method ranking second in use was the "principle approach"--giving specifics and helping the students associate them with general statements. This method was used by over 80 per cent of all teachers and preferred by 28 per cent of these teachers.

Over 50 per cent of the teachers having formal training in the "principle approach" use this teaching method for instructing all areas of basic agriculture. Less than 30 per cent of all basic agriculture instructors preferred this method.

There was a great deal of interest shown by teachers of basic agriculture to learn more about the "principle approach." Over 70 per cent of the teachers who did not attend the curriculum workshop expressed a desire to learn more about the "principle approach" as did over 90 per cent of those teachers attending the curriculum workshop on this method.

UTAH

Stanley S. Richardson

CHRISTENSEN, FRED MATT. A Study of Off-Farm Agricultural Occupations in Box Elder, Cache, and Rich Counties in Utah to Determine Educational Needs. Thesis, M.S., 1967, Utah State University. 49 p. U.S.U. Library, Logan.

Purpose. -- The purpose of this study was to evaluate off-farm agricultural occupations to identify the job opportunities, the training requirements, and the prior education and background desired for entering these jobs.

Method. -- The author checked the telephone directories that were in use in the three counties. After receiving the names of the various companies, he interviewed the manager or some other responsible individual in each of the firms listed. Information obtained was recorded on Forms I and II that were provided through the cooperation of the National Center for Advanced Study and Research in Ag. Education.

Findings. -- Within the 117 organizations that employed persons in off-farm agricultural occupations, it was found that there were 75 different types of off-farm ag. occupations with a total of more than 2,100 employed. About one third of this number were in the unskilled areas and another one third were in the packing, canning, or processing areas. There were nearly one half of those studied who indicated that they required highly specialized or additional vocational training.

SHIPLEY, WILLIS EDWARD. A Feasible Study of Vocational Agriculture on the Secondary School Level in the Cardston School Division. Thesis, M.S., 1967, Utah State University; 42 p. U.S.U. Library, Logan.

Purpose. -- The purpose of the study was to find out how many students would be available to take vocational education in Cardston, Alberta, Canada and what could be done to provide for vocational education in agriculture in the Cardston School Division.

Method. -- Information was collected by reviewing the permanent records of each high school in the Cardston Division. The male students were interviewed to determine interests and abilities.

Findings. -- It was found that 84% of the male students were interested in and could, no doubt, profit from a vocational education program.

WASHINGTON

C. O. Loreen

BLAKELY, MICHAEL L. A Survey of Administrators and Directors of Selected Schools in Eastern Washington Which Offer No Vocational Agriculture Education. Thesis, M.S., 1967, Washington State University. 72 p. Library, Washington State University, Pullman.

Purpose. -- The purpose of this study was to obtain answers to specific questions from administrators and board members of selected schools in Eastern Washington which offer no vocational agriculture as a part of their curriculum. An effort was made to determine the following by a personal interview with each respondent:

1. To establish the background and experiences the administrators and board members in non-participating schools have had with vocational agriculture.
2. To survey the opinions of administrators and board members of non-participating schools concerning the value of agricultural education.
3. To determine why no vocational agriculture is being offered in those selected schools surveyed.
4. To identify problem areas and misconceptions which inhibit the development of vocational agricultural programs in those schools surveyed.

Method. -- The investigator surveyed the superintendent, principal, and one board member in each of 16 selected schools in Eastern Washington which do not offer vocational agriculture as a part of their curriculum. The personal interview was used to collect the data. A questionnaire was utilized. The schools surveyed were small to medium sized rural schools.

Findings. -- The study concludes that the majority of graduating seniors enroll in an academic college and only about 15% attend vocational or technical schools.

Over two-thirds of the administrators and board members have had no training in vocational education. In those schools surveyed only 50% of them offer vocational education training to students and only 25% offer adult education classes.

Over 65% of administrators and board members felt the primary purpose of vocational agriculture was either to provide vocational training for farming or related agricultural occupations or to provide a broad agricultural background to assist in the general education of the student. The Future Farmers of America was endorsed as an important part of the agricultural program by respondents.

Low student enrollment and the lack of competent teachers were given as the two most important reasons for not offering vocational agricultural education in most schools.

In general most administrators and board members do not consider an agricultural department expensive to operate, but they do feel the cost of initiating a program is a problem. Opinions of respondents dealt with Federal aid, red tape, and governmental control. Some felt State and Federal guidelines inhibit the establishment of vocational agriculture in certain schools. They thought an agricultural department does cause some added administrative problems, but that these problems would not be important enough to become a factor in determining whether to establish a program or not.

HANSEN, CHESTER KIRK. A Study to Determine Employment Opportunities and Agricultural Knowledges Needed by Employees in the Nursery, Greenhouse, Landscaping, and Chemical Applicator Businesses in King County, Washington. Thesis, M.S., 1967, Washington State University. 144 p. Holland Library, Washington State University, Pullman.

Purpose.-- The purpose of the study was to determine what employment opportunities existed and what knowledges are required for such employment in the ornamental horticultural industry.

Method. -- A questionnaire was used to collect data by the personal interview method. The population served included the 138 licensed nursery, greenhouse, landscaping, and chemical applicator businesses located in King County, Washington. The breakdown of the total business population surveyed included 28 nurseries, 32 greenhouses, 50 landscaping firms, and 28 chemical applicator firms within the bounds of King county. The sample drawn from this population included seven nurseries, eight greenhouses, 12 landscaping firms, and seven chemical applicator firms. The sample was selected for an alphabetized list of the population through use of a table of random numbers. The sample consisted of a total of 34 businesses.

Findings. -- A total of 157 full-time and 86 part-time jobs were found to exist, with a mean of 93% of employer responses indicating a major problem in filling job vacancies with qualified personnel. All employers preferred to employ workers having some degree of vocational or technical training, obtained either at the high school or post-high school level.

In the nursery business the essential knowledges were:

1. Plant production and propagation, with a knowledge of economic plants and seeds, plant pests, and chemicals being important.
2. Business management and marketing, including knowledge of working with people outside the firm.

In the greenhouse business the essential knowledges were:

1. Plant production and propagation, including knowledge of economic plants and seeds, greenhouse and nursery crop management, and soil or growing media.
2. Horticultural mechanization and automation, including knowledge of maintenance, repair, and construction.

In the landscaping business the essential knowledges were:

1. Plant production and propagation, including knowledge of economic plants and seeds and landscape construction.
2. Business management and marketing, including knowledge of working with people outside the firm.
3. Horticultural mechanization and automation, including knowledge of mechanical power and maintenance, repair, and construction.

In the chemical applicator business the essential knowledges were:

1. Plant production and propagation, including knowledge of economic plants and seeds, plant pests, and chemicals.
2. Business management and marketing, with knowledge of working with people outside the firm considered of prime importance.
3. Horticultural mechanization and automation, including knowledge of mechanical power.

HOWELL, RICHARD S. The Need and Training Required in Turf-grass Management for Public Schools of Southwest Washington. Thesis, M. S., Washington State University. 45 p. Holland Library, Washington State University, Pullman.

Purpose. -- The purpose of this study was to determine the need for and the competencies required for turf-grass management in southwest Washington. These objectives were given careful consideration:

1. To identify present and emerging off-farm occupational jobs in turf-grass management in southwest Washington, for which vocational and technical education in agriculture should be available.
2. To determine present and anticipated numbers of employees in each occupation, using classifications by industry and those developed at Ohio State.
3. To determine competencies in turf-grass and related fields needed for job entry and advancement.

Method. -- The information was obtained through the use of a questionnaire and by personal interviews with representatives of 20 businesses or establishments engaged in turf-grass management in southwest Washington.

Findings. -- The following competencies are essential to golf course, school district, and city park personnel:

1. Fertilizer and plant nutrients
2. Soil preparation
3. Identify grasses and weeds
4. Knowledge of irrigation practices
5. Knowledges of fertilizers
6. Lawn cutting and edging
7. Operate and maintain mower equipment
8. Operate and maintain other turf or horticultural equipment
9. Layout and install automatic fertilizer and/or irrigation systems
10. Power machinery, maintenance, and operation.

A high school diploma was not essential to 15 per cent of the respondents; but 35 per cent of the responding businesses and establishments felt that to have a high school diploma was essential, and 20 per cent stated that it was essential to have post-high school work or a college degree.

The mean salaries range from a low of $425 to a high of $675 per month. The part-time workers draw from $2.00 to $2.75 per hour.

Separate courses were found to be desired for golf course, city parks, and school district personnel. The demand for strickly turf-grass management personnel is limited to golf courses, and job training for these personnel is not feasible for all public schools in southwest Washington. A course in turf-grass management should be included in an ornamental horticultural curriculum which is necessary training for the city park and school district personnel. The ornamental horticultural curriculum could be taught in two or three public schools in southwest Washington without creating an oversupply.

LOREEN, C. O. Occupational Opportunities and Training Needs of Youth for Non-Farm Agricultural Jobs in Washington State. State Staff Study, 1967, Washington State University. 87 p. Agricultural Education Office, Washington State University, Pullman.

Purpose. -- The purpose of this study was to secure information about the non-farm agricultural occupations in the state of Washington upon which to provide occupational guidance in agriculture and to aid in planning new programs in agricultural education.

Method. -- Data were gathered by selected teachers by means of survey forms and personal interviews with owners, managers, or other persons in companies, businesses, and agencies who were considered best qualified to provide the desired information about the occupations and the employees.

Findings. -- The 768 responses indicated employment in 158 different job titles.

Firms generally did not hire employees just out of high school, but preferred those who were 23 to 30 years of age. These employees stayed in a given job title from 11 to 15 years, on the average.

A farm background and some type of work experience was found to have definite advantage to the person seeking employment in a non-farm agricultural position.

These competencies were considered important for entry into most of the job titles:

1. Employee relations with supervisor.
2. Employee relations with fellow workers.
3. Communications.
4. Salesmanship and customer relations.

Specific competencies which were important for entry into the job titles included in the study were identified for each job title. Also identified were the job titles which needed specific groups of competencies.

Basic training in agriculture is important for entry into a large majority of the job titles identified in this study.

SHAH, JAFAR ALI. Agricultural Skills and Abilities Needed by Teachers of Agriculture in West Pakistan. Thesis, M.S., 1967, Washington State University. 38 p. Holland Library, Washington State University, Pullman.

Purpose.-- The purpose of the study was to identify the agricultural skills and abilities needed by teachers of agriculture in West Pakistan. The study was based upon the responses of 30 teachers of the West Pakistan Agricultural University, Lyallpur.

Method. -- A questionnaire was developed and pre-tested. Questionnaires were mailed to collect information. The questionnaire categorized the skills into four different stages: Essential, Desirable, Optional, and Of No Value.

Findings. -- All the skills listed in the questionnaire were considered important by the respondents with the exception of three skills, i.e., dehorning, horseback riding, and ear notching and branding.

In the area of general crops it was found that skills in selection of seed, controlling of pests, and applying manures were considered more important than plowing, storing manures, identifying major weeds, crop harvesting, planking, and grading of crops.

Selection of varieties, preparing seed bed, sowing of seed, and spraying against insects and pests were considered important skills in the area of fruits and vegetables. Spraying of trees, harvesting crops, and picking of fruit were considered less important.

In the area of farm mechanics the ability to work with the animal drawn implements was considered more important than "operating a tractor."

Selection of farm animals and poultry was considered a valuable skill in animal sciences.

SMITH, DYLE. A Study to Determine Why Some School Districts in Washington State do Not Offer Vocational Agriculture in their High School's Course of Study. Thesis, M.S., 1967, Washington State University. 55 p. Holland Library, Washington State University, Pullman.

Purpose. -- The purpose of this study was to obtain answers to specific questions from administrators and school board members of non-participating schools regarding the omission of the program of vocational agriculture from their curriculum. Some of the areas to be investigated were as follows:

1. The opinion of administrators of nonparticipating schools as to the value of vocational agriculture as an educational experience.
2. To what extent have administrators and school board members of nonparticipating schools had experience with the program of vocational agriculture in the past.
3. Additional administrative problems that would result if vocational agriculture was added to presently established curricula.
4. The need for facilities in schools presently not participating in a vocational agriculture program.
5. The effect of the words "Vocational Agriculture" in the title and its possible suggestion of a limited educational experience.
6. The educational background of administrators not participating and the possible effect on the decision of nonparticipation.

Method. -- This study included 15 school districts in western Washington that do not offer vocational agriculture as an integral part of their curriculum.

The superintendent, principal, and one school board member of each school district were personally interviewed. A total of 15 superintendents, 14 principals, and 12 school board members were contacted.

A total of 24 questions were included in the questionnaire. Some of the questions were open-ended and allowed for additional expression of views and attitudes pertaining to each question.

Findings. -- The findings showed that a large majority of administrators interviewed were positive in their opinion of vocational agriculture as an agricultural experience. They felt that the name "Vocational Agriculture" was a barrier to the program. Over half of those interviewed had not been associated with the vocational agriculture program in the past. The majority of the administrators and school board members did not believe that the program of vocational agriculture produced excessive administrative problems. There is a lack of awareness of new program opportunities available under Federal legislation. Over 50 per cent of those interviewed indicated that facilities and funds would not be a barrier to the initiation of the program of vocational agriculture. Federal involvement did not enter into the decision regarding the exclusion of vocational agriculture with a large majority of the administrators and school board members. All of the administrators expressed a desire for more information regarding vocational education.

There is a lack of awareness of new program opportunities associated with the agri-business concept of the vocational agriculture program. A large majority of those interviewed listed "Not an agricultural area" as the main reason why vocational agriculture was not being offered in the school.

STOCKER, CHARLES G. Education Needed for Entry Into Nursery and Turf Management Occupations in the Spokane Area. Thesis, M.S., 1967, Washington State University. 54 p. Holland Library, Washington State University, Pullman.

Purpose. -- The purpose of the study was to determine the kind of education that a high school graduate needs for entry into the nursery and turf occupation.

Method. -- A questionnaire was used to collect data by personal interview.

Findings. -- Both industries would start to hire people at 18 years of age, but on the average, the turf area wanted their personnel older. A high school education was essential but home background made little difference in employment status. Work experience was needed by some job titles but not for all in both industries. It is difficult to find qualified individuals to fill the existing job titles today.

The respondents were willing to permit students to visit and observe their operations. They would hire the individuals for seasonal and part-time labor.

The areas of technical training considered most important were chemicals, plant sciences, and soil sciences.

The high school course of speech would be a valuable asset for entry into both occupations. Courses in agriculture, English, mathematics, and shop were considered important by both industries.